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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,265	03/28/2001	Wolfgang Fraas	P01,0047	6597
21171	7590	07/27/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			BHANDARI, PUNEET	
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DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/806,265	Applicant(s) FRAAS ET AL.	
	Examiner Puneet Bhandari	Art Unit 2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments with respect to claims 8-15 have been considered but are moot in view of the new ground(s) of rejection (Double Patenting).

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 8, 9, 10 & 15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of copending Application No. 09/806594. Although the conflicting claims are not identical, they are not patentably distinct from each other because of following correspondences.

Regarding claims 8, 9, & 15, a method for transmitting data from communication terminals to a switching system via a packet-oriented communication network corresponds to "a method for connecting exchanges via a packet oriented communication network" disclosed in claim 7.

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The limitation setting up a data format formed of substructural elements for data transmission between a switching system and communication terminals corresponds to "data transmission involves data packets subdivided into substructure elements" disclosed in claim 7, lines 2-3.

The limitation said communication terminals being connected to a packet oriented communication network via a hub and said switching system being connected to said packet-oriented communication network via an access unit corresponds to "the connecting exchanges are connected to the packet-oriented communication network via a respective conversion device" disclosed in claim 7, line 3-4.

The limitation transmitting said data in a form of substructural elements to the said hub by a communication terminal corresponds to "transmitting, via a transmitting one of the connecting exchanges dated to be transmitted as a substructure elements to an associated transmitting conversion device" disclosed in claim 7, lines 7-8.

The step of inserting said substructural elements into data packet by said hub, transmitting said data packets to the access unit via packet-oriented communication network corresponds to "inserting via the transmission conversion device, the substructure elements into data packet" disclosed in claim 7, lines 9-11.

The step of extracting said substructural elements from said data packets via said access unit corresponds to "extracting, via a receiving conversion device

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associated with a receiving one of the connecting exchanges, the substructure elements from the received data packets” disclosed in claim 7, lines 12-13.

The step of forwarding said substructural elements to said switching corresponds to “forwarding via the receiving conversion device, the extracted substructure elements to the receiving one of connecting exchanges” disclosed in claim 7, lines 14-15.

Regarding claim 15, additional limitation of said switching system being connected to said packet-oriented communication network via an access unit separate from the hub corresponds to “the connecting exchanges are connected to the packet-oriented communication network via a respective conversion device” disclosed in claim 7, line 3-4.

Regarding claim 15, additional limitation of inserting said substructural elements into a data packet by said hub, such that substructural elements from different communication terminals are inserted into a common data packet corresponds to “inserting via the transmission conversion device, the substructure elements into data packet” disclosed in claim 7, lines 9-11.

Regarding claim 10, the limitation data packets are structured as Internet Protocol data packets corresponds to “data packets are structured as Internet protocol data packets” disclosed in claim 8, lines 1-3.

Claims 8, 9, 10 & 15 differ from claim 8 of Application No. 09/806594 for following reasons. Claims 8, 9, 10 & 15 do not claim the substructure elements may be inserted into data packets in an arbitrary order”. Therefore, claims 8, 9, 10 & 15 merely broaden the scope of claim 8 of Application No. 09/806594.

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It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. See *In re Karlosn*, 136 USPQ 184 (CCPA). Also not *Ex parte Rainu*, 168 USPQ 375 (Bd. App. 1969). The omission of reference element whose function is not needed would have been obvious to one skilled in art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims **8-10 & 13** are rejected under 35 U.S.C. 102(b) as being anticipated by Keshav et al. (U.S. 5,623,605). The Keshav et al. (U.S. 5,623,605) reference teaches all the limitations of the listed claims with the reasoning that follows:

Regarding claims **8 & 9**, a method for transmitting data from communication terminals (320,321,322,323 and 324) to a switching system (333) via a packet-oriented communication network (Internet –310) is anticipated by Fig. 3.

The step of setting up a data format formed of substructural elements (ATM data packets) for a data transmission between a switching system (333)

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and communication terminals (320,321,322,323 and 324) is disclosed in column 7, lines 40-64.

The step of communication terminals (320,321,322) being connected to a packet oriented communication network (internet-310) via a hub (100) is anticipated by Fig. 3 and also disclosed in column 5, lines 7-8.

The step of switching system (terminal 330) further being connected to packet oriented network (Internet) said via an access unit (IP Network Interface) is anticipated by fig.4. The reference discloses ATM LAN Switch ((terminal 330) connected to Internet by IP network interface.

The limitation, transmitting said data in a form of substructural elements (ATM cells) to the said hub a by the communication terminal is anticipated by step of transmitting and receiving ATM data packets between communication terminal to the hub as disclosed in column 7, lines 40-64.

The limitation, inserting said substructural elements (ATM cells) into data packets (IP data packet) disclosed in column 13, lines 25-40.

The limitation, transmitting said data packet to the access unit via the packet-oriented communication network is anticipated by Fig 4. The reference also discloses corresponding IP packet is transmitted over Internet to switching system (330) in column 13, lines 25-40 and fig 4.

The step of extracting said substructural elements from the said data packets via said access unit is anticipated by decapsulating the frame received from the IP network interface to get ATM cells as disclosed in column 13, lines 40-47.

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The step of forwarding said substructural elements to said switching system is anticipated by ATM cells are provided to the required application in the switching system disclosed in column 13, lines 40-47.

Regarding claim 10, the limitation data packets are Internet Protocol Data packet is disclosed in column 13, lines 25-40.

Regarding claim 13, the step of arranging said data transmission and said substructural elements in a payload area of an Internet Protocol data packet such that a substructural elements beings in a segment defined as first payload segment of internet protocol data packet is anticipated by the payload of the IP packet containing an ATM data packet as disclosed in column 12, lines 30-60 and also refer the flow chart in Fig. 7.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 11 & 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al. (U.S. 5,623,605) in view of Lyons et al. (US 6,282,196).

Regarding claim 11, Keshav et al. teaches all the limitations of claim 8 (see 102 rejection for claim 8 above) except Keshav et al. does not expressly disclose the architecture of the substructural element exhibiting a cell header,

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consisting of a channel identifier and a length indicator. Lyons et al. (U.S. 6,282,196) discloses architecture of the substructural element exhibiting a cell header, consisting of a channel identifier (CID) and a length indicator (LI) (refer fig. 2 or column 3, lines 45-67). At the time of the invention, it would have been obvious to a person in ordinary skill in the art to modify the cell header of substructural element of Keshav et al. by adding channel identifier and a length indicator fields in cell header as disclosed by Lyons et al.. One in ordinary skill in art would have been motivated to do this to provide efficient ATM transport of small, delay-sensitive packets in applications such as packet voice systems (see column 01, lines 20-25 of Lyons et al.).

Regarding claim **12**, Keshav et al. (U.S. 5,623,605) teaches all the limitations of claim 8 (see 102 rejection for claim 8 above) except Keshav et al. (U.S. 5,623,605) does not expressly disclose the architecture of the referred substructural element having a cell header according to Second ATM adaptation layer. Lyons et al. discloses architecture of the substructural element having a cell header, according to Second ATM adaptation layer (consisting of a Channel ID, a Length Indicator, Reserved field, and a Header Error Check) (refer fig. 2 or column 3, lines 45-50). At the time of the invention, it would have been obvious to a person in ordinary skill in the art to modify the cell header of substructural element of Keshav et al. by adding Channel ID, a Length Indicator, Reserved field, and a Header Error Check in the cell header according to Second ATM adaptation layer as disclosed by Lyons et al. One in ordinary skill in art would have been motivated to do this to provide efficient ATM transport of small, delay-

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sensitive packets in applications such as packet voice systems (see column 01, lines 20-25 of Lyons et al.).

8. Claim **14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al. (U.S. 5,623,605) in view of Westberg et al. (U.S. 5,946,309) Keshav et al. teaches all the limitations of claim 8 (see 102 rejection for claim 13 above) except Keshav et al. does not expressly disclose a pointer in the said first payload segment for designating a start address of the first substructural element segment. Westberg et al. discloses pointers in first payload segment for designating the start address of first substructural element segment (refer fig. 12). At the time of the invention, it would have been obvious to a person in ordinary skill in the art to modify the first payload segment of Keshav et al. the by inserting the pointer into the payload area immediately after the header as disclosed by Westberg et al. (U.S. 5,946,309). One in ordinary skill in art would have been motivated to do this to provide efficient microcell (substructural) alignment at the receiving station (see column 06, lines 55-65 of Westberg et al.).

9. Claim **15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al (5,623,605) in further view of Bharucha et al. (US 6,229,821). A method for transmitting data from communication terminals (320,321,322,323 and 324) to a switching system (333,332,331,330) via a packet-oriented communication network (Internet –310) is taught by Fig. 3 of Keshav et al., comprising

The step of setting up a data format formed of substructural elements (ATM protocol) for a data transmission between a switching system and

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communication terminals is taught by step of transmitting and receiving data using ATM protocol between the communication terminal and switching system as disclosed in column 7, lines 40-64.

The limitation communication terminals (320,321,322) being connected to a packet oriented communication network (internet-310) via a hub (100), is taught by Fig.3 of Keshav. The reference further discloses processing system (hub) may operate as a gateway to enable data transfer between the network" disclosed in column 5, lines 7-8.

The limitation switching system (terminal 330) further being connected to packet oriented network (internet) said via an access unit (IP Network Interface) separate from the hub (100) is taught by Fig. 4 of Keshav et al.. The reference discloses that the hub (100) and access unit (IP Network interface) are separate from each other (refer Fig 3 and 4).

The limitation transmitting said data in a form of substructural elements (ATM cells) to the said hub a by the communication terminal is taught by step of transmitting and receiving data using ATM protocol between the communication terminal to the hub where it is converted into an IP packet as disclosed in column 7, lines 40-64.

The limitation inserting said substructural elements into data packets is taught by ATM cells from communication terminals (320) are encapsulated into an frame as disclosed in column 13, lines 25-40.

The limitation transmitting said data packet to the access unit via the packet-oriented communication network is taught by corresponding IP packet

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is transmitted over Internet to switching system (330) disclosed in column 13, lines 25-40 and fig 4.

The limitation extracting said substructural elements from the said data packets via said access unit is taught by decapsulating the frame received from the IP network interface to get ATM cells as disclosed in column 13, lines 40-47.

The limitation forwarding said substructural elements to said switching system is taught by ATM cells are provided to the required application in the switching system disclosed in column 13, lines 40-47.

Keshav et al. fails to disclose substructural elements from different communication terminal are inserted into a common data packet. Bharucha et al. discloses that multiple substructural elements (mini packet) are inserted into frame (refer Fig. 6). At the time of the invention it would have been possible to one in ordinary skill in art to add multiple substructural elements of Bharucha et al. to the frame of Keshav et al. one in ordinary skill in art would have been motivated to do this reduce delay for transmitting compressed voice (column 2, lines 14-20 of Bharucha et al.).

Response to Arguments

10. Applicant's arguments filed 02/25/2005 have been fully considered but they are not persuasive.

Regarding claims **8 & 9**,

Applicant argues that Keshav et al fails to disclose a hub connecting a plurality of communication terminals to a packet oriented network. This contention not persuasive. Fig.3 of Keshav et al teaches communication

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terminals (320,321,322) being connected to a packet oriented communication network (internet-310) via a hub (100).

Applicant argues that Keshav et al. fails to disclose switching system connected to a packet-oriented communication network via an access unit. This contention not persuasive. Fig. 4 anticipates switching system (terminal 330) further being connected to packet-oriented network (internet) said via an access unit (IP Network Interface).

Applicant argues that Keshav et al. fails to disclose communication between the communication terminals and the switching system over the packet-oriented network, even when the communication terminals and switching system do not provide a direct interface to packet-oriented communication network. This contention not persuasive. Applicant in claim 8 does not claim above limitation.

Applicant argues that Keshav et al. fails to disclose hub combines substructural elements from different communication terminals into a common data packet. Applicant in claim 8 does not claim above limitation.

Therefore, it is held that Keshav et al. anticipates the limitations of claim 8 &9 for the reasons provided in the above art rejection section.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bernstein et al. (US 6,404,765), Christie et al. (US 6,172,977), Mauger (US 6,483,842) and Brueckheimer et al. (US 6,574,233).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Puneet Bhandari whose telephone number is 571-272-2057. The examiner can normally be reached on 9.00 AM To 5.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PB

Puneet Bhandari
Examiner
Art Unit 2666

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